

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Harold M. Forman and Trevor G. Smith
For RECLOSABLE SEAL, PACKAGE, METHOD AND APPARATUS
Serial No. 09/693,963
Filed 10/23/2000
Group Art Unit 3721
Examiner:

1042 Camp Trail Road
Quakertown, PA 18951

March 31, 2001

REVISED PRELIMINARY AMENDMENT

Hon. Commissioner of Patents and Trademarks
Washington, DC 20231
Sir:

Responsive to the Office Action dated 3/28/01 requiring revision of the Preliminary Amendment filed 3/21/01, some typographical errors have been noted in claims 54, 55, and 68, and it is requested that the following corrections be entered.

Clean versions of claims 54, 55, and 68

54. A method of making a reclosable interlocking seal having a female outer part and a male inner part for a resealable package having front and back faces, consisting of the steps of,

- a) forming a longitudinally sealed cylindrical tube of packaging film with a thermoformable strip secured to the film inside the tube in substantially ends-abutting relationship, and with the surface of the strip not secured to the film in facing relationship within the tube,
- b) moving the portion of the tube within which the strip is disposed between a pair of spaced apart heated male and female forming dies,
- c) moving said dies toward one another to press the face of the strip not secured to the film against itself to form two apposed strip faces extending entirely across the film tube, and continuing to move said dies toward one another into mating position and forming the central part of the strip extending across the film tube into the recess of said female die to form the

tip of an arrowhead shape of the reclosable seal,

- d) moving toward one another into closed position a pair of interlock forming heated dies positioned at opposite sides of the female die to press portions of the margins of the strip immediately adjacent to the central part of the strip inward against one another to complete the inner male and outer female parts of the reclosable interlocking seal held between the female die and the pair of interlock forming heated dies while partially retracting the male die.

55. The method of making a reclosable interlocking seal as set forth in claim 54 wherein said step of pressing portions of the margins of the strip immediately adjacent to the central part of the strip inward against one another to form the inner and outer parts of the reclosable interlocking seal includes the step of moving said interlock completing dies inward to pinch together the portion of the strip therebetween to form the inturned base of the arrowhead shape in the interfitted parts of the reclosable seal,

68. Apparatus for making a reclosable interlocking seal having a female outer part, a male inner part and snap detents, for a resealable package having front and back faces, the package being formed from a longitudinally sealed cylindrical tube of packaging film with a thermoformable strip secured to the film inside the tube in substantially ends-abutting relationship, and with the surface of the strip not secured to the film in facing relationship within the tube, comprising,

- a) a pair of spaced apart heated male and female dies,
- b) means for moving the portion of the tube within which the strip is disposed between said pair of spaced apart heated male and female dies,
- c) means effective when actuated in a first way for moving said male and female dies toward one another to press the face of the strip not secured to the film against itself to form two apposed strip faces extending entirely across the film tube, and effective for continuing to move said dies toward one another into mating position to form the central part of the strip extending across the film tube into the recess of said female die to form the tip of an arrowhead shaped reclosable seal, said means for moving said male and female dies toward one another also being operative when actuated in a second way to move said male and female dies away from one another,
- d) a pair of interlock seal completing heated dies positioned at opposite sides of

the female die and having open and closed positions,

e) means for moving toward one another into closed position said pair of interlock seal completing heated dies positioned at opposite sides of said female die to press portions of the margins of the strip immediately adjacent to the central part of the strip inward against one another effective to complete the inner male and outer female parts of the reclosable interlocking seal held between said female die and said pair of interlock seal completing heated dies.

Patented July 1, 1964

REMARKS

Some typographical errors have been noted requiring the following changes, which have been made in the foregoing clean copies of claims 54, 55 and 68, and which are shown on the marked claims that follow.

Claim 54, line 10, change "d)" to -- c) -- ; line 16, change "e)" to -- d) --

Claim 55, line 1, after "making" insert -- a --

Claim 68, line 7, change "b)" to -- a) -- ; line 8, change "c)" to -- b) --; line 10, change "d)" to -- c) --; line 19, change "e)" to -- d) --; line 21, change "f)" to -- e) --;

RECEIVED
JAN 10 1968
FBI - NEW YORK

Version with markings to show changes made

Additions are shown underlined, and deletions are shown in brackets []

54. A method of making a reclosable interlocking seal having a female outer part and a male inner part for a resealable package having front and back faces, consisting of the steps of,

- a) forming a longitudinally sealed cylindrical tube of packaging film with a thermoformable strip secured to the film inside the tube in substantially ends-abutting relationship, and with the surface of the strip not secured to the film in facing relationship within the tube,
- b) moving the portion of the tube within which the strip is disposed between a pair of spaced apart heated male and female forming dies,
- [d] c) moving said dies toward one another to press the face of the strip not secured to the film against itself to form two apposed strip faces extending entirely across the film tube, and continuing to move said dies toward one another into mating position and forming the central part of the strip extending across the film tube into the recess of said female die to form the tip of an arrowhead shape of the reclosable seal,
- [e] d) moving toward one another into closed position a pair of interlock forming heated dies positioned at opposite sides of the female die to press portions of the margins of the strip immediately adjacent to the central part of the strip inward against one another to complete the inner male and outer female parts of the reclosable interlocking seal held between the female die and the pair of interlock forming heated dies while partially retracting the male die.

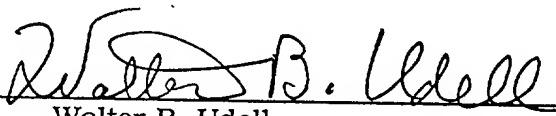
55. The method of making a reclosable interlocking seal [seals] as set forth in claim 54 wherein said step of pressing portions of the margins of the strip immediately adjacent to the central part of the strip inward against one another to form the inner and outer parts of the reclosable interlocking seal includes the step of moving said interlock completing dies inward to pinch together the portion of the strip therebetween to form the inturned base of the arrowhead shape in the interfitted parts of the reclosable seal,

68. Apparatus for making a reclosable interlocking seal having a female outer part, a

male inner part and snap detents, for a resealable package having front and back faces, the package being formed from a longitudinally sealed cylindrical tube of packaging film with a thermoformable strip secured to the film inside the tube in substantially ends-abutting relationship, and with the surface of the strip not secured to the film in facing relationship within the tube, comprising,

- [b] a) a pair of spaced apart heated male and female dies,
- [c] b) means for moving the portion of the tube within which the strip is disposed between said pair of spaced apart heated male and female dies,
- [d] c) means effective when actuated in a first way for moving said male and female dies toward one another to press the face of the strip not secured to the film against itself to form two apposed strip faces extending entirely across the film tube, and effective for continuing to move said dies toward one another into mating position to form the central part of the strip extending across the film tube into the recess of said female die to form the tip of an arrowhead shaped reclosable seal, said means for moving said male and female dies toward one another also being operative when actuated in a second way to move said male and female dies away from one another,
- [e] d) a pair of interlock seal completing heated dies positioned at opposite sides of the female die and having open and closed positions,
- [f] e) means for moving toward one another into closed position said pair of interlock seal completing heated dies positioned at opposite sides of said female die to press portions of the margins of the strip immediately adjacent to the central part of the strip inward against one another effective to complete the inner male and outer female parts of the reclosable interlocking seal held between said female die and said pair of interlock seal completing heated dies.

Respectfully submitted,


Walter B. Udell
Attorney for the Applicant

WBU/meu

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Harold M. Forman et al
For: RECLOSABLE SEAL, PACKAGE, METHOD AND APPARATUS
Serial No.: DIVISIONAL APP. of 09/693,963
Parent App. Filed 10/23/2000
In Group Art Unit 3727
Examiner: Jes F. Pascua

1042 Camp Trail Road
Quakertown, PA 18951

December 14, 2001

DIVISIONAL APPLICATION PRELIMINARY AMENDMENT

Hon. Commissioner of Patents and Trademarks
Washington, DC 20231

Sir:

Please amend the enclosed true copy of the above-identified parent application as follows. Also enclosed is a clean copy of this divisional application as amended in accordance with the following.

IN THE SPECIFICATION:

Page 1, at the top, delete the title and insert in lieu thereof --- COMPOSITE WEB FOR MAKING RESEALABLE PACKAGES AND RECLOSABLE SEALS ---

Page 1, line 2, before the period (.), insert --- and is a divisional of copending application serial number 09/693,963 filed on 10/23/2000 ---

Page 1, line 3, at the end of the line insert --- composite webs of packaging material for making ---;

Page 1, line 11, after "continuous" insert --- composite ---, and after "flexible" insert --- packaging ---;

Page 1, line 30, before "technology" delete "film and strip" and insert --- composite web";

Page 2, cancel lines 32 through 35;

Page 2, line 36, cancel "A further" and insert --- Accordingly, it is a primary ---;

and after "invention" cancel ---is ---;

Page 3, line 3, cancel "a novel" and insert --- an ---;

Page 3, line 4, cancel "as aforesaid";

Page 3, line 6, before "packaging" insert --- novel composite ---;

Page 3, cancel lines 7 through 14;

Page 3, line 15, cancel "novel" and cancel "as aforesaid";

Page 3, line 16, before "packaging" insert ---novel composite web"; and after
"film" cancel "and" and insert ---having ---;

Page 3, line 18, cancel "novel" and cancel "as aforesaid";

Page 3, cancel lines 22 and 23;

Page 3, line 33, before "composite" insert --- novel ---;

Page 4, line 2, before "composite" insert --- novel --- .

IN THE ABSTRACT: Substitute the enclosed new Abstract.

IN THE CLAIMS:

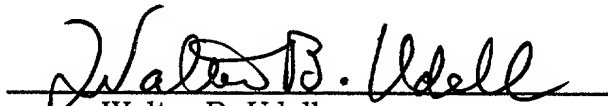
Cancel product, method, and apparatus claims 12 to 71 inclusive.

REMARKS

Also forwarded herewith are:

- DECLARATION DISCLAIMING INVENTION BY ONE OF JOINT APPLICANTS
- DECLARATION BY JOINT APPLICANT CLAIMING SOLE INVENTION
- DECLARATION FOR UTILITY PATENT APPLICATION BY SOLE INVENTOR
- COPY OF DECLARATION FOR UTILITY PATENT APPLICATION BY JOINT INVENTORS FILED IN PARENT APPLICATION
- Check #2643 in the amount of \$130.00 for petition fee for correction of inventorship.

Respectfully submitted,


Walter B. Udell
Attorney for Applicant
215 - 538 - 7227

ABSTRACT

A novel continuous web of composite packaging film for making packages having improved openable and reclosable interlocking seals, the seal having male and female portions of arrowhead shape in cross section, snap detents, and being formed transversely to the direction of film flow during package formation at line speed. The packaging film is provided at package length intervals with thermoformable strips secured thereto transversely to the running length of the film, and is fed to a modified standard vertical form, fill and seal packaging machine where the film is formed into a bag with the thermoformable strip inside in ends abutting folded facing relationship at the upper end of the bag, product deposited into the bag, the bag sealed, the reclosable interlocking seal formed, and the bag severed from the next bag being formed. The package reclosable seal provides positive auditory and tactile indications of the closing of the reclosable seal so that the consumer is assured that the package has been resealed even in the absence of visual package inspection.